

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P574412

Luminaire Tested: **CCW-VA-AMBER-U-T4FT**

Issue Date: 10/14/2021

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Test Information

Test Method: LM-79-08
 Report Number: P574412
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 10/14/2021
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: INVUE
 Catalog Number: CCW-VA-AMBER-U-T4FT
 Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4FT DISTRIBUTION LENS
 Light Source: 1620 CCT, 0 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 998.7 lumens
 Efficiency: N/A
 Efficacy: 33.0 lumens/watt
 Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
 IES Classification: Type IV - Short
 BUG Rating: B0 - U0 - G1

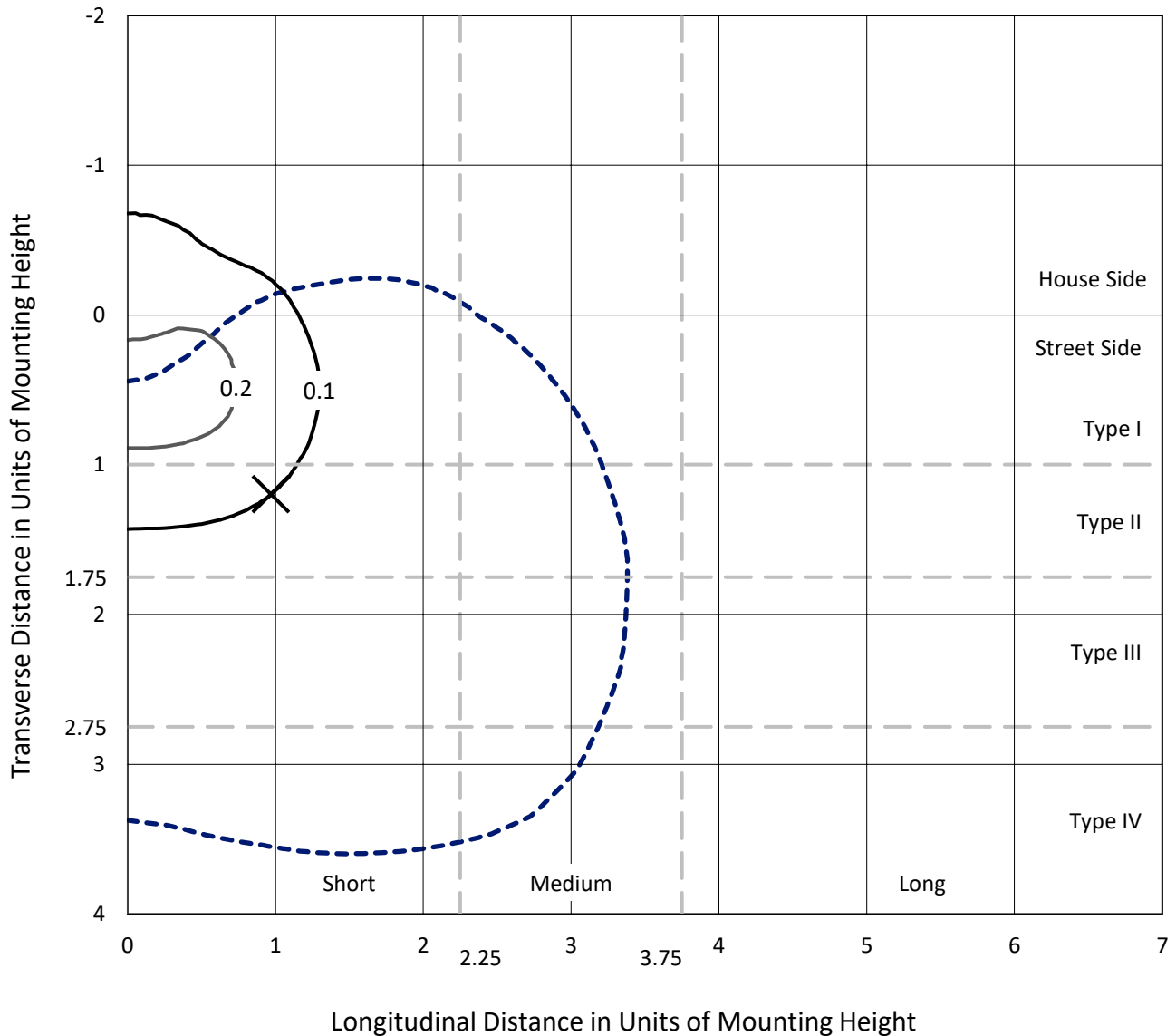
Input Watts (W): 30.3
 Input Voltage (V): 120
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021

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Iso-Footcandle Lines of Horizontal Illumination

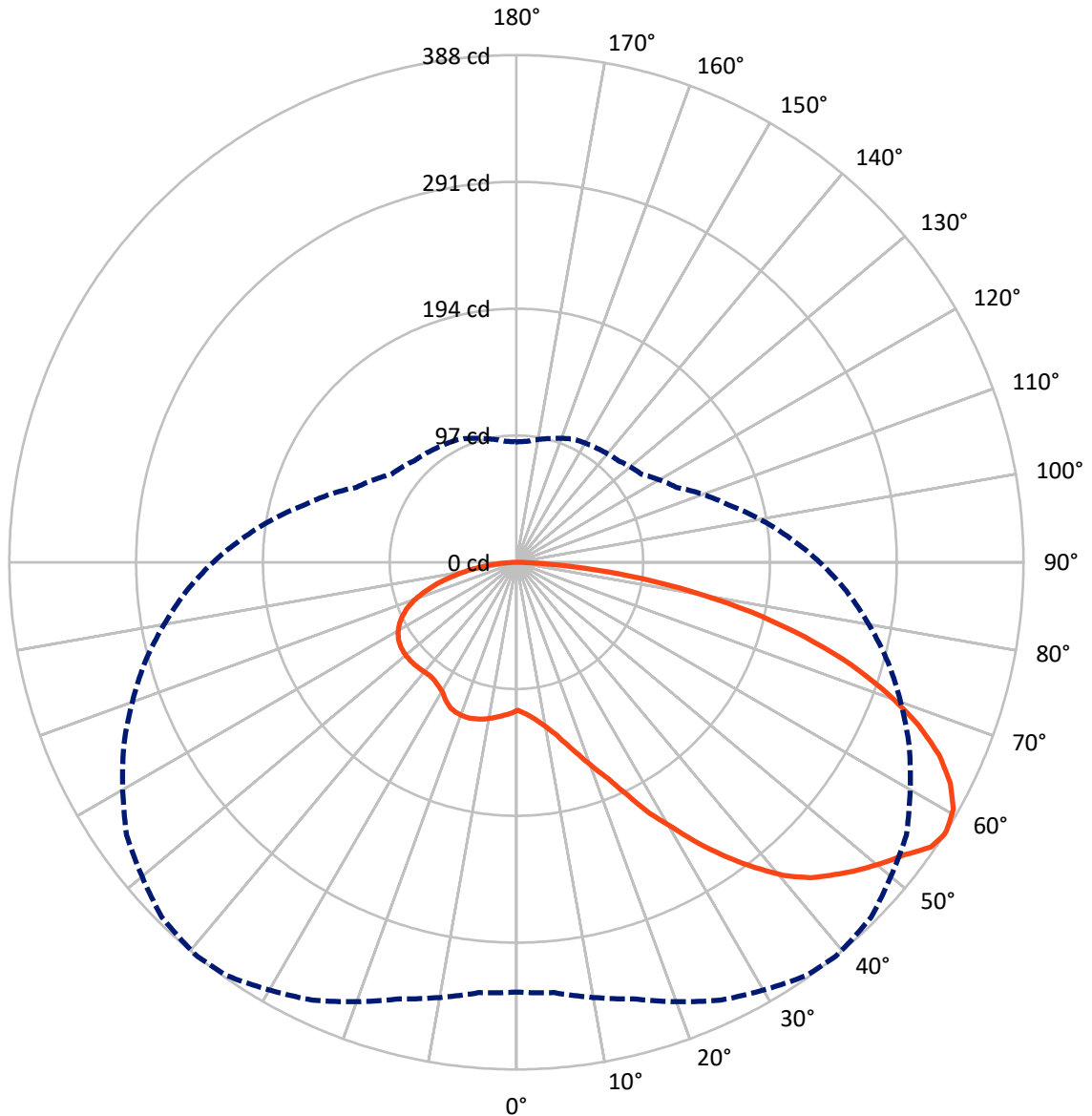
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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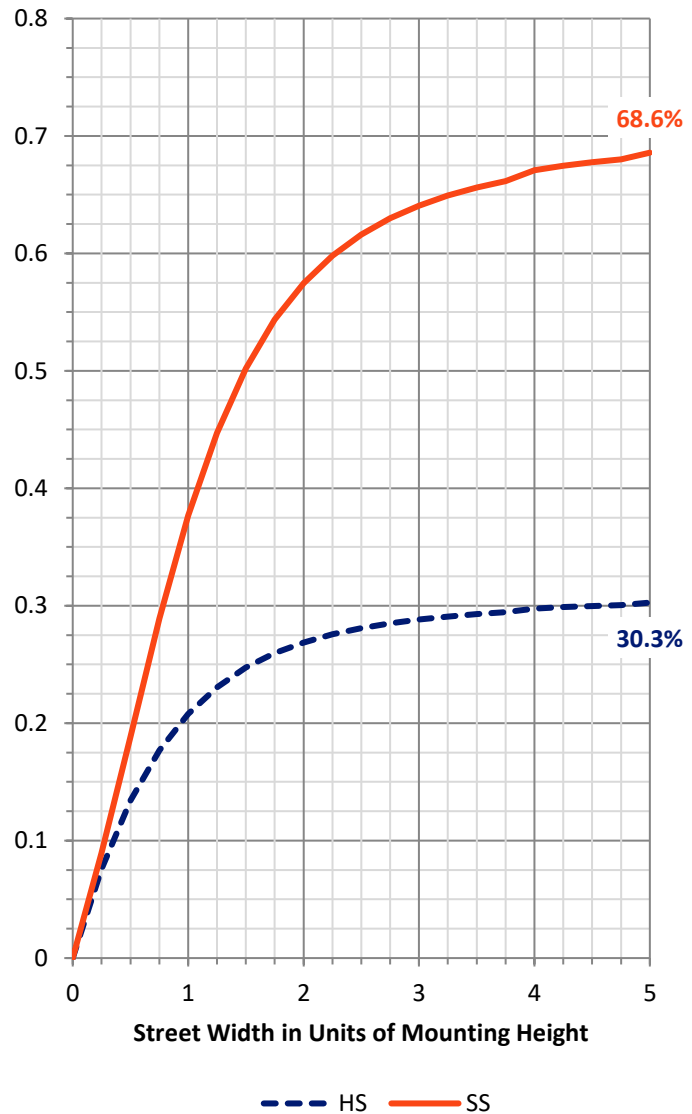
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	306.4	0.0	306.4
	% Fixture	30.7	0.0	30.7
Street Side	Lumens	692.3	0.0	692.3
	% Fixture	69.3	0.0	69.3
Total	Lumens	998.7	0.0	998.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.5	1.1
10°-20°	38.2	3.8
20°-30°	73.9	7.4
30°-40°	119.5	12.0
40°-50°	167.9	16.8
50°-60°	207.4	20.8
60°-70°	206.1	20.6
70°-80°	139.5	14.0
80°-90°	34.8	3.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	998.7	100.0
0°-180°	998.7	100.0

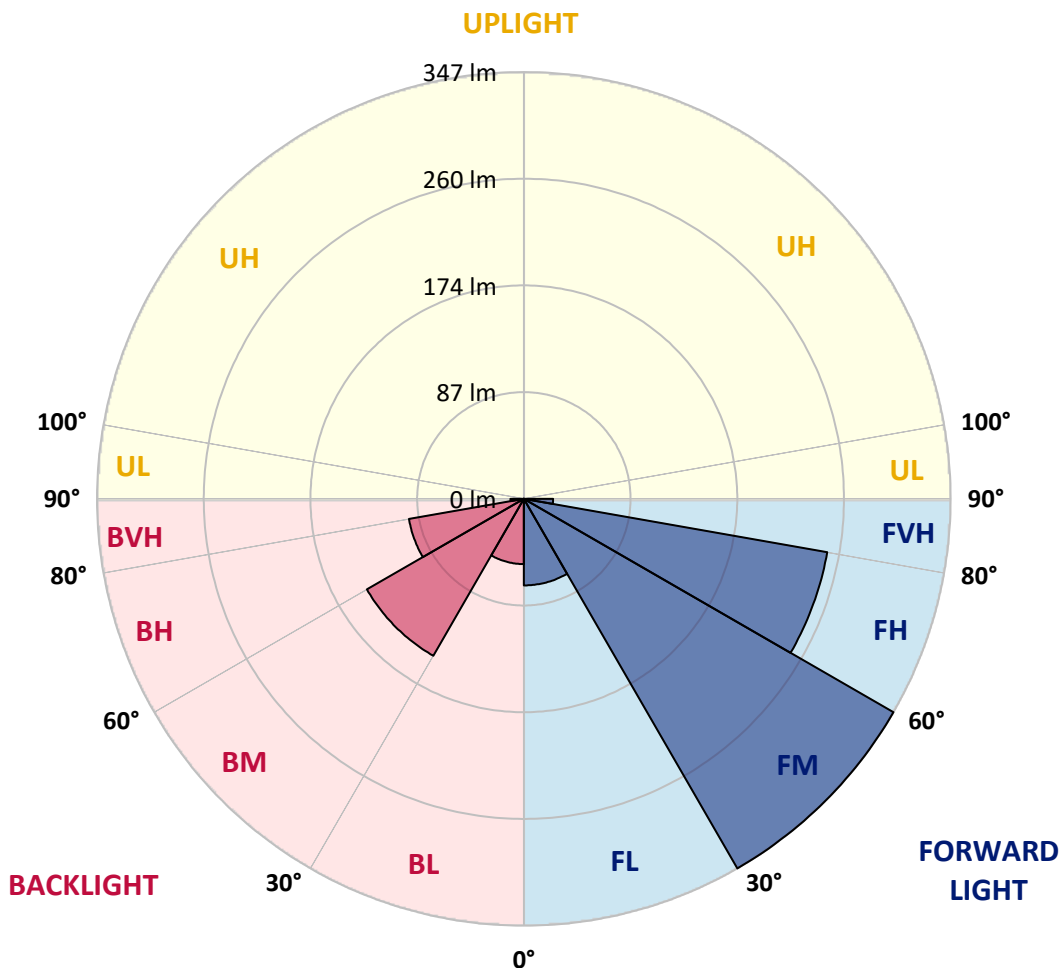


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	70.5	7.1			
FM (30°-60°)	347.3	34.8			
FH (60°-80°)	250.7	25.1			G0/660
FVH (80°-90°)	23.8	2.4			G1/100
BL (0°-30°)	53.1	5.3	B0/110		
BM (30°-60°)	147.4	14.8	B0/220		
BH (60°-80°)	94.9	9.5	B0/110		G0/110
BVH (80°-90°)	11.0	1.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2
2.5°	116.6	116.5	116.3	116.3	116.0	115.7	115.5	115.2	115.4	115.7	115.9
5°	120.0	119.7	119.7	119.4	118.9	118.9	118.5	117.8	117.7	117.5	117.5
7.5°	125.2	124.7	124.9	124.4	124.0	123.3	122.6	121.8	121.5	120.5	119.5
10°	131.1	131.0	130.6	129.8	129.3	128.7	127.9	126.6	125.5	124.3	123.5
12.5°	138.2	137.9	138.0	137.4	136.7	135.6	134.4	133.0	131.0	128.7	127.2
15°	147.4	146.8	146.8	146.6	145.1	144.8	143.5	140.5	137.7	134.7	131.1
17.5°	158.6	158.4	157.8	157.2	156.3	155.2	154.0	150.6	146.5	141.7	137.0
20°	170.5	170.2	170.6	169.7	167.9	167.4	165.5	161.6	156.6	151.1	143.9
22.5°	183.5	183.8	183.8	183.5	182.0	180.1	178.4	173.4	167.6	160.9	152.4
25°	199.3	199.4	200.3	201.3	200.3	197.4	195.1	187.3	179.5	171.0	161.0
27.5°	217.0	216.0	218.5	220.2	218.5	217.8	212.7	204.2	193.5	182.7	170.3
30°	234.2	234.2	236.3	238.8	237.7	235.8	231.7	220.7	208.4	194.8	179.8
32.5°	250.1	251.9	252.8	258.5	257.9	257.0	252.2	237.7	222.4	206.9	189.0
35°	268.9	268.3	272.1	275.6	278.4	277.2	273.6	259.0	238.9	219.6	199.1
37.5°	283.1	284.4	287.7	294.0	296.0	296.6	292.2	277.0	254.2	233.2	210.3
40°	294.0	294.9	301.4	309.3	313.4	315.6	311.1	292.8	268.6	244.1	219.0
42.5°	302.7	303.3	310.1	321.4	328.3	330.4	326.4	307.0	280.8	252.8	226.2
45°	308.5	309.6	317.6	329.2	339.9	341.4	339.5	319.6	291.7	261.1	231.4
47.5°	313.6	314.8	323.7	338.4	350.3	352.3	350.5	330.6	302.1	268.6	235.8
50°	320.3	321.7	330.6	346.9	360.1	362.4	361.8	342.2	311.9	277.0	240.4
52.5°	326.7	327.8	338.4	356.6	370.8	372.4	371.9	353.1	321.9	286.0	246.3
55°	331.8	333.0	345.6	368.1	383.4	385.1	381.8	361.5	329.7	292.6	251.8
57°	329.2	330.9	346.2	370.1	386.6	388.4	384.3	364.6	332.0	294.5	253.7
57.5°	328.4	329.7	345.6	369.9	386.8	388.4	384.3	364.4	331.8	294.3	253.7
60°	317.3	320.2	338.1	364.4	382.3	384.5	380.5	358.3	328.0	290.0	249.6
62.5°	302.3	306.2	325.1	351.4	371.6	373.1	369.1	348.0	319.4	281.0	241.0
65°	280.7	286.8	306.5	332.0	353.8	355.7	351.7	330.9	305.2	267.2	228.2
67.5°	259.6	263.2	284.4	308.5	328.9	331.7	328.3	309.8	285.6	248.9	211.0
70°	235.5	238.1	255.6	279.3	299.8	302.1	299.2	281.9	259.1	226.1	191.0
72.5°	206.6	209.4	224.2	246.1	264.3	268.0	266.0	248.1	227.4	198.8	168.7
75°	174.0	177.1	190.4	207.8	225.6	227.7	225.4	212.3	193.6	167.7	141.4
77.5°	141.1	143.1	152.7	165.9	179.7	184.3	183.7	174.3	155.5	135.0	113.6
80°	105.6	105.9	110.9	121.8	132.9	136.2	137.0	128.6	116.2	100.7	85.1
82.5°	66.7	67.8	70.5	78.7	84.0	88.6	89.7	84.8	77.0	67.3	57.7
85°	31.1	30.1	32.3	35.1	42.7	42.7	44.1	41.5	39.2	36.0	29.8
87.5°	2.6	2.5	2.5	2.6	4.1	4.4	7.1	7.8	8.4	8.4	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2
2.5°	115.5	115.4	114.9	114.9	115.2	115.7	115.9	116.0	116.2	116.3	116.3
5°	117.4	117.2	116.9	116.6	116.9	117.1	117.5	117.8	117.8	118.2	118.0
7.5°	119.1	119.2	118.9	118.8	118.8	119.1	119.7	120.1	120.5	120.6	120.9
10°	122.9	122.0	120.8	120.1	120.1	120.8	121.4	122.0	122.6	122.9	122.9
12.5°	126.3	125.2	122.9	122.0	121.8	122.4	123.2	124.1	124.6	125.0	125.0
15°	129.3	128.4	125.6	123.5	122.9	123.3	124.3	125.3	126.1	126.6	126.6
17.5°	135.1	132.4	128.7	125.2	124.0	124.1	125.2	126.3	127.2	127.5	127.3
20°	140.7	137.1	131.6	126.6	124.6	124.0	125.0	126.4	127.2	127.6	127.6
22.5°	146.9	143.1	134.5	127.9	124.3	123.3	124.3	125.5	126.4	126.7	127.0
25°	155.8	149.1	137.7	129.0	123.8	122.0	122.6	123.8	124.9	125.0	124.9
27.5°	163.7	156.1	142.0	130.1	122.8	119.4	118.8	119.7	121.4	122.4	122.8
30°	170.6	163.6	146.5	131.0	120.8	115.1	114.3	114.6	115.7	118.6	118.8
32.5°	180.9	170.0	150.9	131.8	118.5	112.8	111.7	111.4	111.7	113.2	113.2
35°	188.0	177.2	155.4	133.1	116.8	110.9	109.9	109.4	109.1	107.6	107.1
37.5°	197.1	185.2	159.6	134.4	116.0	110.2	108.7	109.0	107.4	103.1	101.9
40°	207.2	192.4	163.9	135.6	116.3	110.4	109.0	108.8	106.2	100.3	99.0
42.5°	212.1	198.5	168.3	137.3	117.5	110.8	109.6	109.1	105.9	99.2	97.5
45°	216.9	202.9	171.6	138.7	118.8	111.4	109.9	109.4	105.8	98.3	97.0
47.5°	221.1	205.7	173.1	139.4	119.7	111.9	110.0	109.3	105.0	97.8	96.6
50°	223.1	207.2	173.1	139.4	120.0	112.3	109.7	108.7	103.8	97.0	96.0
52.5°	226.2	208.2	171.7	138.5	119.5	112.3	109.1	107.4	102.2	96.0	95.0
55°	230.8	209.8	169.9	137.1	118.5	111.4	108.1	105.8	100.1	94.4	93.7
57°	232.3	210.4	168.7	135.4	117.2	110.2	106.8	103.9	98.1	92.9	92.1
57.5°	232.0	210.1	168.2	135.0	116.8	109.7	106.5	103.5	97.6	92.6	91.8
60°	227.9	207.2	165.3	132.1	114.3	107.3	103.8	100.4	94.4	90.0	89.4
62.5°	221.1	200.6	160.1	128.3	110.9	103.9	100.3	96.4	90.4	86.6	86.3
65°	209.7	189.6	152.6	122.8	106.7	99.5	95.5	91.4	86.2	82.8	81.9
67.5°	190.5	174.9	142.0	115.1	100.1	94.0	89.7	85.4	80.6	77.8	77.1
70°	174.6	158.9	128.6	105.4	92.1	86.3	82.3	78.2	74.1	71.5	71.3
72.5°	154.4	139.3	111.7	93.5	82.0	76.4	73.3	69.6	66.4	64.1	64.1
75°	129.9	118.0	94.3	79.3	70.0	65.8	63.2	60.3	57.6	56.0	56.3
77.5°	103.3	94.3	77.0	64.1	57.2	54.5	52.0	50.3	48.7	47.3	47.5
80°	76.2	69.5	56.6	47.1	43.8	41.3	40.9	39.8	38.9	38.4	37.6
82.5°	52.2	46.2	37.6	32.3	29.8	29.1	29.2	29.2	29.4	29.4	29.1
85°	27.1	24.8	19.1	17.3	17.0	17.7	18.7	19.3	19.1	19.1	18.7
87.5°	7.8	7.1	6.1	5.5	5.8	6.3	5.5	5.3	5.2	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Report Generated By 670245763

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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



NVLAP Lab Code: 200050-0



Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021
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